Subject: Re: Beginner: Oplot line t^(-5/3)
Posted by Craig Markwardt on Mon, 12 Nov 2012 20:25:56 GMT
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On Monday, November 12, 2012 11:20:31 AM UTC-5, Charlie Paul D'auria wrote:
> Hi there!
>
>
>
> Please bear in mind that I am a complete IDL beginner so excuse any foolishness!
>
>
>
> I have managed to plot an XY graph with data plots.
>
>
>
> My problem lies with my next stage: I need to generate a line of gradient t^(-5/3) (then use oplot over my data).
>
>
>
> I get the error 'Attempt to subscript T with I is out of range.' and when I type print,line I only get one value for my line...
>
>
>
> Here is some code I was provided with as a guide, which I have modified slightly:
>
>
>
> line=dblarr(9999)
>
> n=1E-4
>
> t=dblarr(9999)
>
>
>
> for i=0,9999 do begin
>
> t(i)=i
>
> line=n*t(i)^(-5./3.)
>
> endfor
>

The other posters showed you how to vectorize your problem. I'll point out the problem with your code.

A FOR loop from 0 through 9999 contains 10000 elements, because 0 is included in the count. Therefore you should dimension your variables with 10000 elements.

The IDL Way is that a variable declared like this,
  T = dblarr(N)
Is stepped through like this,
  FOR i = 0L, n_elements(T)-1 do begin ...
Note the "-1"

Craig
